WE CLAIM:

1. A method of wired or wireless physiological data acquisition via sound input port of a computing device using amplitude modulation of data with one or more carrier frequencies.

5   2. The computing device of claim 1 selected from a group consisting of a desktop computer, a notebook, a tablet PC, a PDA, a mobile phone, a land line phone, a tape recorder, and a digital voice recorder.

3. The computing device of claim 1 transmitting data to a secondary computing device, such as a server either via wire or wirelessly.

10   4. The data of claim 1 including a plurality of channels modulated by multiple carrier frequencies.

5. The carrier frequencies of claim 1 distributed over the permissible sound port frequency range in such a manner that neither frequency band overlaps with any other frequency band.

15   6. The carrier frequencies of claim 1 supplied by the audio output of the computing device or generated by circuitry outside of the computing device.

7. The sound input port of claim 1 wherein sound input port is a microphone port, a line port, or the wireless sound port of a computing device.

8. The wireless sound port of claim 7 wherein wireless protocol selected from a

20   group consisting of a bluetooth protocol and a Wi-Fi protocol.

9. The bluetooth protocol of claim 8 wherein a headset profile is used to transmit data to and from the computing device.

10. The physiological data acquisition system using said amplitude modulation method of claim 1 to transmit multiple cannels of physiological data to said microphone port of said computing device.

11. The computing device of claim 1 wherein the demodulation of the composite signal by software occurs in real time.

12. The EKG Stethoscope using said amplitude modulation method of claim 1 comprised of:

(a) a stethoscope,

(b) an electrocardiograph, and

(c) EKG electrodes,

whereby a medical practitioner is enabled perform simultaneous auscultation and electrocardiography.

13. The EKG Stethoscope of claim 12 wherein the EKG is modulated by a carrier frequency and added to an audio signal resulting in a composite signal that is transmitted to the sound port of a computing device.

14. The EKG Stethoscope of claim 12 visualizing both phonocardiogram and EKG concurrently on the screen of the computing device in the stack mode or superimposed.

15. The EKG electrodes of claim 12 located on the chest piece to simplify application of said EKG Stethoscope on patients.

16. The EKG electrodes of claim 12 attached to the subject's skin connected to the said EKG Stethoscope via standard wired EKG leads.

17. The EKG Stethoscope of claim 12 having means for visualizing the EKG and audio waveform on a read-out display located on the chest piece.

18. The EKG Stethoscope of claim 12 having means to signal the operator events of the EKG cycle, whereby said event will include the QRS complex, which corresponds to the start of systole, the P-wave, which corresponds to the start of atrial depolarization, and T-wave, which corresponds to the start of diastole.

19. The EKG Stethoscope of claim 12 having means for transmitting sounds from the chest piece to the operators ears.

20. The EKG Stethoscope of claim 12 having the chest piece mounted on a computing device, such as a PDA.

21. The EKG Stethoscope of claim 12 incorporating means for automatic identification of respiratory cycle, automatic identification of events on EKG, and automatic identification of heart sounds components.

22. The physiological data acquisition system using said amplitude modulation method of claim 1 to transmit sound recordings from 2 or more sound pick-up sensors into said sound input port of the computing device whereby each channel is modulated by its own carrier frequency.